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AN EVALUATION OF A TEAM TEACHING PROJECT

by

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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "An Evaluation of a Team Teaching Project" submitted by Francis Xavier Bischoff in partial fulfillment of the requirements for the degree Master of Education.

ABSTRACT

This study examines team teaching and attempts to evaluate objectively some aspects of this innovation. Non-academic growth is measured in the aspect of critical thinking. Units in English 10 and Science 10 are used to evaluate academic growth of students.

A control group and an experimental group were matched on the basis of grade nine final examinations. These same grade nine inter-school groups wrote the Watson-Glaser Critical Thinking Appraisal. Performances of the two groups were compared.

In the English 10 phase, intra-school control and experimental groups were matched on the basis of grade nine Departmental examinations. A test on pre-determined material was administered prior to and at the conclusion of the unit of work. The t-test was applied and significant differences were sought at the .05 level. The same groups of students were used in the Science 10 phase. No pre-test was given. The Chapter Tests in the Chem-Study Course were used as the basis for testing for differences at the .05 level.

No significant differences were found in the results obtained from the Watson-Glaser Critical Thinking Appraisal. Significant differences favoring the experimental group were found in achievement in both English 10 and Science 10.

Recommendations dealing with the advisability of establishing a school building with the adaptability required for team teaching and staffed with teachers who are committed to the concept are advanced. Such a school could test out other innovations since team teaching provides the framework within which innovations can be tried.

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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

I. INTRODUCTION

In mid-winter of 1964, St. Mary's Junior High School experienced an unusually large number of student drop-outs. Sixteen year old adolescents with no apparent saleable skills, were leaving school to seek employment.

Consultation with these people established that they had left school because of dissatisfaction and frustration--dissatisfaction with the kinds of things the teachers were attempting to teach them, and frustration with their inability to cope with the academic expectations. It appeared to them that the only way in which they could escape from this dilemma was to depart from school.

The staff, disconcerted by the students' reactions, determined to reassess the kinds of things they were doing, and to plan ways in which they might assist the other students who might be facing the same problems. Thus was born a team teaching project.

Much planning was done by staff members before the 1964-1965 school year opened. The initial project was confined to encompass three classes of grade nine students. Two multiple-discipline teams, one in the humanities and one in the sciences, were organized. Class schedules were constructed so that each team had the three classes of students for three consecutive class periods. This allowed for regrouping of teachers and students without interrupting any other part

of the programme. This type of schedule also allowed for variation in period length, for the total time of three class periods need not be broken into three equal parts. If planning showed the need, period X might be sixty minutes in length, period Y might be twenty minutes in duration, and period Z might use the remaining time. The only restriction was that the total time be not more than the scheduled three periods.

Class sizes varied with the aim of individual activities as planned by the team. The three classes might meet as one in a large group session. Laboratories might include the total experimental group or any fraction thereof. Seminar groups, where students attempted to verbalize and exchange ideas with their peers, were kept to a maximum size of twelve students. Much of the learning done by students was done individually, either in the Instruction Materials Center using reference books, tapes or records, or in private consultation with the team teacher involved.

Students and teachers expressed satisfaction with the work done during the year. There was but one dropout and this for a reason that was beyond the control of the school, and students achieved at least as well on final examinations as previous classes had done. The value of reorganizing the school structure was suggested, and the decision was made to expand the plan in the 1965-1966 school year.

The same kinds of activities were undertaken with several major changes:

- i) It was possible to include all academic classes from grades seven through ten;

ii) Teachers were organized into single-discipline rather than multiple-discipline teams.

At the end of the year students and teachers again expressed satisfaction with the general plan. Teachers seemed to be better prepared to perform their functions than they had been before they became members of a team. Student achievement seemed to be on par with that of students taught in a conventional setting and in a conventional way. Student attitudes towards their work and study habits, towards their fellow students and teachers, seemed to improve.

All these judgments were made subjectively by teachers biased by their belief in, and their enthusiasm for, the work they were doing. Some objective evaluation seemed to be both desirable and necessary so that: (1) The experiences of these teachers and students might be shared with others facing the same problems that they faced; and (2) Their own future plans might be refined and/or modified. The present study is intended to make an objective assessment of several aspects of the project described.

II. THE PROBLEM

Background to the Problem

A true team teaching situation might be evaluated on each item of the following schema. Proponents of this type of organization maintain that it will be found lacking in none of the aspects named.

Non-academic growth. While academic growth of students must be one of the final outcomes of any educational enterprise, team teaching

places at least equal emphasis on the aspect of character growth for both student and teacher. This aspect of growth focuses on individualization, responsibility and attitudes.

The individuality of both student and teacher must be fostered and maintained. The student must be able to attain in breadth and depth at his own rate and by those means that suit him best. The teacher must be able to test his own strengths with those of others, and to adapt the strengths of others to his own makeup, be these strengths in technique, presentation, personality, et cetera.

The proper responsibilities must be placed where they ought to be. The student must be willing to accept the responsibility for his own actions, and accept the consequences for those actions. What he learns, how he learns it, and how well he learns it must be his decision to make. The teacher must accept the responsibility for the total education of the child, not only in the subject area with which he happens to be associated. The total school climate becomes a personal responsibility.

The growth of student and teachers must be reflected in the attitude towards self, peers and towards those in authority. The student must be constructively critical of his own actions, be they physical or mental. He must be willing to accept the values of others and to build his own value system in a deliberate manner. The teacher, in turn, must accept the child as he finds him and attempt to work from there. He must assist the student in developing an acceptable personality, acceptable not only to society, but also to himself. The

teacher must see himself as another resource, rather than as a fountain of truth.

Academic growth. As has been pointed out previously, one outcome of any educational enterprise must be academic growth. In team teaching, the academic growth is related to both student and teacher. The student must grow academically to the optimum of his ability at his optimum rate. He must compete with other members of society and thus be able to perform the same tasks we expect of all students. Academic examinations of some type will always be with us. The teacher must grow professionally. He must be researching his field continually so that he can make wise decisions in the four major areas of aim, content, methods and agents of education.

What is he attempting to do in educating a child? What should be some of the final outcomes for education in his own subject specialty? in his own school? in his own class? with an individual student? What are his real aims? In the area of content, he must make appropriate decisions as to what he should teach and when he should teach it. He must even satisfy the basic question, "Why should I teach?" Once he has decided what to teach, he must select the method which is best suited for the material and for the child. Should it be presented in a large group class, small group, or should it be the responsibility of the student to ferret it out? Would the material be presented most effectively visually, or aurally, or by a combination of both? During all these deliberations he must satisfy himself that he always works within the framework of aims and content as established by society through the Department of Education and local school jurisdictions.

Finally, he must take a serious look at the agents in education. What is the actual job of teaching? Could many of the things he is doing be done by para-professionals, or non-professionals? This would relieve him to do the things for which he has been educated. What is the professional task of the teacher?

A study that would attempt to evaluate all of the criteria mentioned would have to be a most ambitious undertaking. This study is not of such magnitude. Rather, it focuses upon the student, selects out two of the aspects mentioned, and attempts an evaluation of them.

Statement of the Problem

This study attempted to measure some aspects of a team teaching project to see what effect it had, if any, on academic and non-academic growth of the students at St. Mary's High School.

Specifically, the study attempted to answer three questions:

i) Students in a team teaching situation are forced more and more into making independent decisions. Does this mean that their thinking becomes more refined, more critical?

ii) Will grade ten students who have been exposed to team planning, team presentation and team evaluating perform better on an objective examination on a segment of English 10 than will their counterparts who were taught in a conventional way?

iii) Will team-taught Science students achieve higher scores on predetermined tests than will their conventionally taught peers?

Significance of Problem and Need for Study

Team teaching is being attempted in many states of the United States. Canadian educators, experiencing a growing awareness of the type of organization, are more and more exploring phases of the total programme. Varying degrees of success are reported. However, most of the yardsticks used have been subjective in nature. A team of educational researchers is presently reporting a statistical evaluation of team teaching for the National Education Association. Spokane Public Schools are presently in the final stages of another evaluation. A concept that has captured the imagination of so many educators deserves more critical evaluations before it is finally judged.

Numerous cases of team teaching projects are reported throughout Western Canada. Subjectively, most of them are termed successful. This study is one effort to measure objectively some aspects of a particular team teaching project in Edmonton.

III. LIMITATIONS OF THE STUDY

Team teaching cannot be evaluated conclusively by the results of this study for at least some of the following reasons:

i) The tests measure only two aspects of the total programme, i.e., the non-academic growth of the student in the area of critical thinking, and the academic growth of the student in tenth grade studies in English and Science. More research is needed to measure the other aspects;

ii) The control group, both students and teachers, have had some experience with team teaching activities, and thus there may have been some transfer of significant variables from the experimental situation to the control group;

iii) The evaluation is based on a short-term project while a true evaluation of team teaching should be done on a long-term basis;

iv) Physical facilities of the school did not lend themselves ideally to team teaching, and therefore effects may have been less than could have been achieved.

v) Each team teaching unit has its own peculiarities because of its specific facilities, staff, student populations, and administration. What will hold true for this study may not hold true for other team teaching projects.

IV. DEFINITION OF TERMS

For the purposes of this study, the meaning to be attached to certain terms is as follows:

Team teaching. A teaching approach in which the learning experiences of a student are planned, presented, and evaluated collectively by two or more teachers.

Team. Two or more teachers collectively planning, guiding and evaluating the learning experiences of a student.

Humanities. Those subjects which seem to group themselves around the English-Social Studies pattern. For the purpose of this study they would include Language, Literature, Social Studies and the Fine Arts.

Sciences. Those subjects which are related to the fields of mathematics, physical and biological sciences.

Large group. Where the whole experimental group meets at one teaching station with the presentation made by one or more members of the team.

Laboratory. A situation where any or all students in the experimental group are located at one teaching station with team members available for individual consultation.

Seminar. A work group of twelve or fewer students, with or without a teacher present,

- i) verbalizing the things which they think they have heard in seminars;
- ii) verbally diagnosing and/or defending their own or seminar members' work.

Individual learning. A student working in an isolated area doing research by himself with only occasional help from teachers, librarians, or other students.

Instructional materials centre. This physical space encloses the usual library reference books, but also includes:

- study carrels
- tape listening facilities
- record listening facilities
- film strip viewing facilities

Single-discipline team. Two or more teachers teaching the same subject.

Multiple-discipline team. Two or more teachers in different subject areas responsible for the total education programme of a given group of students.

Para-professional aides. Individuals with some specialized training but with no formal teacher education, for example, Bachelor of Arts graduates.

Non-professionals. Clerks, machine operators, et cetera.

Conventional school. A school departmentalized to any degree, where an individual teacher is responsible for the educational programme in a particular class in a particular subject or subjects.

CHAPTER II

A REVIEW OF THE LITERATURE

Change is not new to North American schools. The first American schools were pragmatic in nature, meeting the needs of the times in the best possible way. A second dimension was soon added, that education should be available to all citizens, and later, required for all citizens. With the current explosion of knowledge, emphasis on a third dimension becomes equally important, and that dimension is quality.

In order to obtain quality in education, leaders have suggested programmes with different emphases. A few would retain the status quo. Some urge that we reduce the number of things schools are doing, and thus provide "quality" education for selected, talented students. A more vociferous group would add--add more schools, more teachers, more courses, longer school days, et cetera, so that more people could get more education. A further group suggests that we evaluate the kinds of things that educators are doing and improve such factors as instructional institutions, instructional methods, and curricula.

It is because of work of this last group that the following ideas are emerging.

1. Individual differences can be recognized and educational programmes tailored to meet them.
2. Instructional time can be used more effectively, there is nothing sacred about the 45- or 50-minute period.
3. Human talents can be utilized more effectively--thirty students and one teacher is not always the best arrangement.
4. The curriculum can be organized effectively in many different ways.
5. Technology offers much promise for education, both in terms of instruction and administration.

6. Physical facilities can be more fully utilized to facilitate the educational process. The school building should reflect the instructional programme.¹

The implementation of these emerging principles has stimulated much educational activity throughout North America. Non-graded schools, programmed materials, curricular innovations, flexible scheduling, and individualized learning are a few of the many concepts gaining recognition. Another such innovation that is gaining prominence is called team teaching. It attempts, formally, to encompass all six of the previously mentioned emerging ideas: individual differences,² time allotment,³ staff utilization,⁴ curricular reorganization,⁵ technological advance,⁶ and physical facilities.⁷

¹Douglas W. Hunt, "The Premise of Change," *N.A.S.S.P. Bulletin*, Vol. 47, No. 283, May, 1963, p. 2.

²James Angrave, "Team Teaching and Non Grading: A Case for Individual Timetabling in Canadian Schools," *Canadian Education and Research Digest*, Vol. 5, March, 1965, pp. 48 - 59.

³Florence M. Diesman, "Team Teaching Has Many Forms," *English Journal*, Vol. 53, No. 3, March, 1964, pp. 617 - 623.

⁴Nathan Blount, "Fructify the Folding Doors: Team Teaching Reexamined," *The English Journal*, Vol. 53, No. 3, March, 1964, pp. 177 - 179.

⁵Margaret F. Wildering, "The Only Way to Teach," *Arithmetic Teacher*, Vol. 12, April, 1965, pp. 256 - 257.

⁶Betty J. Montag, *et al*, "TV vs. Overcrowding in General Sciences," *The Science Teacher*, Vol. 12, April, 1965, pp. 51 - 55.

⁷Donald P. Mitchell, "Housing Co-operative Teaching Programme," *National Elementary Principal*, Vol. 44, No. 3., January, 1965, pp. 14 - 52.

Definition of Team Teaching

There are many reports on team teaching spread throughout the educational literature. Each project has its own peculiarities in organization and function. It seems that there are as many definitions of team teaching as there are team teaching projects. Close examination of these definitions reveal a set of common elements. Arnold⁸ states four common elements: i) a group of teachers; ii) a group that plans together; iii) a group that teaches together; iv) a group that evaluates together. Brownell,⁹ along with others, suggests the use of certain persons who assist the teachers and students. Probably Trump,¹⁰ the originator of the term 'team teaching', has one of the better definitions for it when he says it is

an arrangement whereby two or more teachers and their aides, in order to take advantage of their respective competencies, plan, instruct, and evaluate, in one or more subject areas, a group of elementary or secondary students equivalent in size to two or more conventional classes, making use of a variety of technical aids to teaching and learning in large-group instruction, small group discussion, and independent study.

Shaplin¹¹ defines team teaching in a very similar way:

Team teaching is a type of instructional organization, involving teaching personnel and the students assigned to them, in which

⁸W. E. Arnold, "Is Team Teaching The Answer?", *School and Society*, Vol. 91, December, 1963, pp. 407 - 409.

⁹John A. Brownell and Harris A. Taylor, "Theoretical Perspectives for Teaching Teams," *Phi Delta Kappan*, Vol. 43, January, 1962, pp. 150 - 157.

¹⁰Lloyd J. Trump, "What is Team Teaching?" *Education*, Vol. 85, No. 6, February, 1965, pp. 327 - 332.

¹¹Judson T. Shaplin, "Co-operative Teaching: Definitions and Organizational Analysis," *National Elementary Principal*, Vol. 44, January, 1965, pp. 14 - 20.

two or more teachers are given the responsibility working together, for all or a significant part of the instruction of the same group of students.

Objectives of Team Teaching

School systems or schools which reorganize on a team teaching basis adopt some of the objectives listed by Corrigan.¹² Objectives for students include: i) to expose students to ideas, methods and personalities of various teachers; ii) to give students a preview of college type education; iii) to develop skills which are important, yet not a part of regular curricula, for example, notetaking, outlining, and study techniques; iv) to promote initiative, discussion, and critical thinking; v) to develop leadership training for students.

For teachers some objectives might be: i) to utilize a teacher's area of specific interest; ii) to utilize a teacher's special skills; iii) to encourage the sharing of ideas; iv) to give teachers experience in both large group and small group learning activities; and v) to involve the classroom teacher in research and in professional reading in depth.

Types of Team Teaching

Whatever the specific objectives in a specific locale may be, four types of team teaching situations are appearing. Anderson¹³ states that a co-operative approach is sound if we wish: i) to achieve flexibility in grouping of students; ii) to eliminate rigid, lock-step

¹²Dean Corrigan and Robert Hynes, "What Have We Learned From Team Teaching?" *Social Education*, April, 1964, pp. 205 - 208.

¹³Robert H. Anderson, "Some Types of Co-operative Teaching in Current Use," *National Elementary Journal*, Vol. 44, January, 1965, pp. 22 - 26.

graded school structure; iii) to use para-professional and non-professional aides; and iv) to make optimum use of technological advances.

The literature suggests that the team approach is not restricted to age groups, subject areas, or ability groupings. At the elementary level, Bahner¹⁴ argues that the team approach combines all the advantages of the self-contained classroom and the departmentalized school organization. Jensen¹⁵ describes an eighth grade project in language and history and suggests positive findings in his research. Peterson¹⁶ finds that at the senior high school level, team teaching is especially useful, designed to overcome: i) inflexible scheduling; ii) unindividualized instruction; iii) rigid class size; iv) ineffective use of time and talent; v) little independent study; and vi) few chances for teacher recognition. Johnson¹⁷ states that team teaching allows for a good use of human resources to enrich instruction in an inservice educational programme. Nelson¹⁸ shows how a team of college

¹⁴John M. Bahner, "Team Teaching in the Elementary School," *Education*, Vol. 85, No. 6, February, 1965, pp. 337 - 341.

¹⁵Lawrell Jensen, *et al*, "Eighth Grade Team Teaching at the Roosevelt Junior High School," *California Journal of Secondary Education*, Vol. 35, April, 1960, pp. 236 - 243.

¹⁶Carl H. Peterson, "Team Teaching in the High School," *Education*, Vol. 85, No. 6, February, 1965, pp. 342 - 347.

¹⁷Overton R. Johnson, "Team Teaching," *American Vocational Journal*, March, 1966, pp. 24 - 25.

¹⁸J. L. Nelson and G. A. Robinson, "Teacher Education Through Team Teaching" *School and Society*, Vol. 91, December, 1963, pp. 409 - 410.

professors used team teaching as a technique so that future teachers will have an insight into its use.

Projects are listed in most academic subject areas, though team teaching is not restricted to academic subjects. Martin¹⁹ describes a successful experience in a course in fundamentals of speech. Diers²⁰ writes of an elaborate scheme where four hundred students and six teachers were teamed in a course in Music History. Johnson²¹ used it in an agriculture course dealing with the repair of small internal combustion engines.

Most projects deal with the usual student clientele of a school. Grouping procedures are employed to bring together the students and teachers as desired. However, extensive work is being done with the exceptional child, both the gifted and the retarded. Smith²² gives advantages of team teaching when employed with the gifted. Taylor,²³ working with the trainable mentally retarded, found in team teaching a vehicle for offering more assistance to these children. Hayes²⁴

¹⁹Charles K. Martin and Daniel I. Munger, "Team Teaching in a Course in Fundamentals of Speech," *The Speech Teacher*, Vol. 4, November, 1965, pp. 331 - 333.

²⁰Harmon Diers, "Team Teaching of Music History," *Music Educators Journal*, Vol. 51, April-May, 1965, pp. 76 - 78.

²¹Overton R. Johnson, *op. cit.*, pp. 24 - 25.

²²William M. Smith, "Team Teaching the Superior Student in Biology," *American Biology Teacher*, March, 1966, pp. 187 - 190.

²³H. Taylor and K. Olsen, "Team Teaching with Trainable Mentally Retarded Children," *Exceptional Children*, Vol. 30, March, 1964, pp. 304 - 309.

²⁴Charles H. Hayes, "Team Teaching in Culturally Deprived Areas," *National Elementary Principal*, Vol. 44, January, 1965, pp. 60 - 65.

writes of the progress made through a programme of team teaching in culturally deprived areas.

Advantages of Team Teaching

The proponents of team teaching claim many advantages for this type of organization. Brownell,²⁵ among others, suggests the following:

- i) practical and effective inservice education through frequent team meetings;
- ii) marked success in inducting new teachers into school systems as a result of internship as team teachers;
- iii) the use of aides to release teachers from routine tasks;
- iv) team involvement in planning and developing team curricula;
- v) because of team structure, the ability to group and re-group frequently by achievement or ability levels;
- vi) the ability to exploit teachers' special talents, knowledge, and training;
- vii) improved guidance from the planned exchange of information about students and the intimate atmosphere within the team;
- viii) improved correlation of subject matter because of co-operative planning in team meetings;
- ix) the identification and use of para-professional aides;
- x) because teams can be kept together for more than one school year, the organization to develop sequences of content and intellectual processes;
- xi) because of team structure, the best use of teacher talent;
- and xii) because of varied groupings and presentations, greater student interest.

²⁵John A. Brownell and Harris A. Taylor, *op. cit.*, pp. 150 - 157.

Mason²⁶ reports further that teacher morale seems to be extremely high among team teachers, and that the efforts of all seem to improve. He further reports that morale of students also improves, that they adjust well to new methods, that they are stimulated to further study, and that they appreciate meeting different lecturers. White²⁷ points out that attitudes of both students and teachers improved, attitudes towards each other and attitudes towards their work. Taylor²⁸ suggests that the school-community relationships are strengthened.

Disadvantages of Team Teaching

Lest the preceding section suggest that team teaching is an ultimate panacea, educators list some of the problems related to it. Editorializing, *The Instructor*²⁹ points out problem areas: 1) Established buildings do not lend themselves to team teaching. ii) The cost of this type of teaching must be somewhat greater, although this has been argued by other authors. iii) Schedules become very complex. iv) It is difficult to find common planning and preparation time for teams. v) Teaching materials are not geared to team teaching. vi) It is difficult to report students' real progress to parents. vii) Teachers

²⁶H. Mason, *et al.*, "A Report on Team Teaching Adopted to a Standard Secondary School Curriculum," *American Biology Teacher*, Vol. 26, pp. 363 - 365.

²⁷Robert W. White, "How Successful is Team Teaching?", *Science Teacher*, Vol. 31, October, 1964, pp. 34 - 37.

²⁸H. Taylor and K. Olsen, *op. cit.*, pp. 304 - 309.

²⁹Editorial in *The Instructor*, Vol. 71, October, 1961, pp. 34 - 37.

are unprepared for this type of teaching. Blount³⁰ adds to these some teacher variables, the lack of agreement on educational objectives, the failure or rejection of leadership, conflicting personalities, and the shortage of time to devote to detail planning and curriculum revision. Trump³¹ adds further that the relations between teachers in team teaching and teachers not in team teaching may cause professional conflicts.

Research and Team Teaching

Whether or not the advantages outweigh the disadvantages is for research to determine. Heathers³² has carefully gathered all the research done on team teaching and although he finds a need for more statistical studies, he suggests that trends are emerging. i) Research says that pupil achievement remains about the same even during implementation. Whatever differences there are favor team teaching. ii) That team teaching causes greater student maladjustment than a conventional organization is not borne out by research. iii) Parents' attitudes are considerably in favor of team teaching, while teachers' attitudes are conclusively favorable. iv) It costs slightly more to inaugurate the programme, but thereafter costs are approximately the same. v) Team teaching is a catalyst of change, be that change in curriculum, in methodology or in instructional equipment.

³⁰Nathan Blount, *op. cit.*, pp. 177 - 179.

³¹Lloyd J. Trump, "Problems Faced in Organizing a School Differently." *American School Board Journal*, Vol. 146-147, November, 1963, p. 7.

³²Glen Heathers, "Research on Implementing and Evaluating Co-operative Teaching," *National Elementary Principal*, Vol. 44, January, 1965, pp. 27 - 33.

Conclusion

The literature on team teaching is primarily descriptive in nature, and statistical studies, while present, are not plentiful. Many educators are waiting for more, so that they can learn from the experiences of others and implement programmes of their own more successfully. They are looking to "team teaching as a major means the school can use to prevent obsolescence in the midst of rapid change."³³

³³Harold Howe II, "The Curriculum, The Team, and The School: An Examination of Relationships," *Journal of Secondary Education*, Vol. 37, No. 6, October, 1962, pp. 353 - 361.

CHAPTER III

RESEARCH METHOD

I. INTRODUCTORY STATEMENT

Carlin³⁴ reports that there is a great scarcity of research on the topic of team teaching, and that which exists still measures the same kinds of things (academic achievement) with the same kinds of tools (standardized tests). He suggests that researchers should be measuring other types of skills, attitudes and competencies. He expresses an immediate need for this type of research, lest team teaching be discarded as another fad. He feels this would be most unfortunate, for he sees team teaching as a vehicle to facilitate other practices such as non-graded schools, educational television, programmed instruction, the use of technological innovations, and even for merit pay.

Even in its limited experience, the staff at St. Mary's High School has come to realize that if it hopes to improve its own programme, it must evaluate what it has been doing. Only with evaluation can improvement be anticipated.

Therefore, this study focused on two of many aspects of team teaching. Each aspect of evaluation has variations in method and conclusion. Thus it is proposed that each be described separately in detail under the following headings:

³⁴Philip M. Carlin, "A Current Appraisal of Team Teaching," *Education*, Vol. 85, No. 6, February, 1965, pp. 348 - 353.

- a) hypothesis
- b) sample
- c) experimental treatment
- d) data collection
- e) instrumentation
- f) statistical treatment.

II. THE NON-ACADEMIC PHASE

Conventional teaching places great emphasis upon academic growth. Team teaching places at least equal emphasis on areas which are not academic in themselves, in the areas of individualization, responsibility, and attitudes. One of these areas is that of critical thinking. Critical thinking is acknowledged as one of the more important goals of education, yet little research has been done in this field. Because of the complexity of our present society, the citizenry must become more and more critical in their appraisals, lest they succumb to the pressures of society to conform.

Hypothesis I. Students in a team teaching school will have developed their critical thinking processes to a greater degree than have students in a conventional school.

Sample. The experimental group consisted of all grade nine students at St. Mary's High School. The control group consisted of all grade nine students at St. James' School and St. Thomas' School. This involved two classes of students in each group. The groups were matched on the basis of the SCAT scores obtained on the 1966 grade nine final examinations.

Experimental treatment. The experimental group was exposed to the situations and expectations developed in team teaching, while the control groups had no such experiences.

Data collection. Each group completed a similar standardized instrument at approximately the same time.

Instrumentation. The Watson-Glaser Critical Thinking Appraisal, Form YM, was used. Along with critical thinking, sub-tests measure: inference, recognition of assumption, deduction, interpretation, and evaluation of arguments.

The authors of the test found the reliability of the test, when administered to 3,037 grade nine students to be .85, this coefficient established on the basis of a split-half procedure. The reliability of the sub-tests ranges from .53 to .74.

Validity of a test is never a generalized characteristic that can be designated by a single correlation coefficient. It is a joint characteristic of the test and the purpose for which the test is used. The only correlations given by the authors deal with the construct validity of the sub-tests, and of the relationship between sub-tests and the total test. These range from .21 to .79.

Statistical treatment. Means for each of the sub-tests and for the cumulative scores were found for each group. The t-test was applied to test for any significant difference at the .05 level.

III. THE ACADEMIC PHASE

The eventual outcome of any educational enterprise needs always to be assessed in some objective way. Current practice is to evaluate the quality of education by measuring academic excellence using some objective scales. Students in a team teaching situation, as well as any other situation, must compete with their traditionally taught counterparts on these tests. Thus, if a project is to be deemed successful, academic growth of its population must be at least on a par with that of other populations. One short term project in each of the humanities and the sciences was used to ascertain whether the academic growth of the team-taught students at St. Mary's High School was equal to that of their counterparts taught in a conventional way.

A. English 10

Hypothesis II. The academic growth of English students taught in a team-teaching situation, will be significantly superior to that of students taught in a traditional way.

Sample. The experimental group was made up of two classes (one superior, one average) of grade ten students and the control group was made up of two classes (one superior, one average) of grade ten students. These groupings are based on I.Q. and the grade nine final examinations.

Experimental treatment. The experimental group was taught by a team of three teachers who planned, and taught collectively. The control group covered the same material with a different member of the staff. The material taught was a unit on the Short Story.

Data collection. A test was administered prior to and at the conclusion of the project.

Instrumentation. Each of the four teachers participating submitted objective and subjective test questions to a test bank. The tests were constructed by randomly selecting sixty objective questions and one analytic question from the test bank. Participating teachers did not see the tests, nor did they correct the tests.

Statistical treatment. The t-test was applied to the difference of means on the pre-test and the post-test.

B. Science 10

Hypothesis III. The academic growth of students in Science taught in a team-teaching situation will be significantly superior to that of students taught in a conventional way.

Sample. The experimental group consisted of two classes of grade ten students (one superior, one average). The control group consisted of two classes of grade ten students (one superior, one average). Grouping was achieved on the basis of I.Q. scores, and results on grade nine final examinations.

Experimental treatment. The experimental group was taught by a team of two teachers who developed the technique along three distinct phases:

- i) Co-operative planning in aims and presentation;
- ii) Co-operative planning with aim and content revision according to student performance;

- iii) Co-operative planning extended through aim and content revision to include individualization, large group sessions and seminars.

Chapters 3, 4, and 5 of the Chem-Study programme were matched consecutively to the phases. Various writers in the field have suggested that each of the phases separately is of no significance to the learner, but that a cumulative effect will become apparent. By setting up the experiment in this way, it was possible to test this assertion. The control group was taught the same material by another science teacher in the same sequence of time. Both groups were tested with identical tests at the conclusion of each phase.

Data collection. Identical tests were administered after the completion of each phase to both experimental and control groups.

Instrumentation. The standard chapter tests suggested in Chem-Study were used in all instances.

Statistical treatment. The t-test was applied to the difference in means between the levels of performance at the conclusion of each phase.

CHAPTER IV

RESULTS IN NON-ACADEMIC PHASE

Critical thinking, for the purpose of this study, is viewed as a composite of attitudes, knowledge and skills. This composite includes: i) attitudes that involve an ability to recognize problems and an acceptance of the general need for evidence to support what is asserted to be true; ii) knowledge of the nature of valid inferences, abstractions, and generalizations in which the weight or accuracy of different kinds of evidence are determined logically; iii) skills in employing and applying the above attitudes and knowledge.³⁵

In attempting to measure it, investigators have enumerated as many as forty separate abilities inherent in critical thinking. Chausow³⁶ reports that after about two years of work, the Inter-College Committee on the Evaluation of Social-Science Objectives, made up of representatives from fifteen colleges and universities, developed the following operational definition of critical thinking:

1. To identify central issues;
2. To recognize underlying assumptions;
3. To evaluate evidence or authority;
4. To draw warranted conclusions.

³⁵G. Watson and E. M. Glaser, *Watson-Glaser Critical Thinking Appraisal Manual* (New York: Harcourt, Brace, and World, 1952).

³⁶Chausow, H. M., "Evaluation of Critical Thinking in the Social Studies," *National Council of Social Studies Yearbook* 35, 1965, pp. 77 - 99.

The Co-operative Study of Evaluation in General Education sets forth the following abilities that appear to be related to the concept of critical thinking:

1. The ability to define a problem;
2. The ability to select pertinent information for the solution of the problem;
3. The ability to recognize stated and unstated assumptions;
4. The ability to formulate and select relevant and promising hypotheses;
5. The ability to draw conclusions validly and to judge the validity of inferences.³⁷

For the purposes of this study, the following list of skills as tested by the Watson-Glaser Critical Thinking Appraisal were used, assuming that it is representative of most of the findings of most investigators:

1. inference
2. recognition of assumption
3. deduction
4. interpretation
5. evaluation of arguments.

Most school systems organized on a team teaching basis name the development of critical thinking as one of the objectives.³⁸ The staff working in this experiment also stated this to be one of their objectives. It was decided therefore to test the hypothesis that students

³⁷Paul Dressel and Lewis B. Mayhew (Directors, General Education), "Explorations in Evaluation, Final Report of the Co-operative Study of Evaluation in General Education," *American Council on Education*, Washington, D.C., 1954.

³⁸Dean Corrigan and Robert Hynes, *op. cit.*, pp. 205 - 208.

in this team teaching situation would be more critically minded than their peers in a conventional school. The specific questions to be tested was: will students in a team teaching school have developed their thinking processes to a greater degree than have students in a conventional school?

Summary of Results

The grade nine classes at St. Mary's High School were matched with an approximately equal number of grade nine classes in neighbouring schools. As a result, there were forty-five students in the experimental group and fifty-four students in the control group. The students were matched on the basis of the SCAT scores obtained in the June final examinations. The resulting statistics are summarized in Table I.

Scores are raw scores obtained from the Examinations Branch of the Department of Education. The results show no significant difference at the .05 level in the Verbal Section of the SCAT test. However, there is a highly significant difference in the Quantitative aspect, in favor of the control group.

The Watson-Glaser Critical Thinking Appraisal was administered to the experimental and control groups near the conclusion of the 1965 - 1966 school year. The t-test was applied to the results of each sub-test, and to the total scores, and significant differences were sought at the .05 level. The resulting statistics are summarized in Table II.

It will be noted that there were no significant differences in any of the sub-tests nor in the total score.

TABLE I

COMPARISON OF EXPERIMENTAL AND CONTROL GROUPS
GRADE IX SCAT SCORES, JUNE, 1966

Variable	Mean		Standard Deviation		df	t	p
	Exp. (N=45)	Control (N=54)	Exp.	Control			
SCAT (Verbal)	38.44	41.67	10.27	9.97	97	1.563	0.121
SCAT (Quantitative)	29.71	36.61	7.58	6.66	97	4.781	0.000

TABLE II

WATSON-GLASER CRITICAL THINKING APPRAISAL (FORM YM)
GRADE IX RESULTS

Variable	Mean		Standard Deviation		df	t	p
	Exp. (N=45)	Control (N=54)	Exp.	Control			
Inference	9.04	10.07	3.15	3.08	97	1.620	0.108
Recognition of Assumption	10.47	9.56	2.94	3.96	97	1.264	0.209
Deduction	15.38	15.89	3.09	2.98	97	0.827	0.410
Interpretation	15.89	15.91	3.11	2.74	97	0.031	0.975
Evaluation of Arguments	8.89	9.09	2.99	2.22	97	0.384	0.702
Total Score	59.22	60.67	8.49	8.28	97	0.845	0.400

Conclusions

The hypothesis that students in the experimental group will score higher on the Watson-Glaser Critical Thinking Appraisal than the control group is rejected.

It should be noted that while both groups scored equally well on the Critical Thinking Appraisal, the control group was significantly superior on the quantitative aspect of the SCAT which was used as the basis for matching. This aspect raises several questions:

1. Is critical thinking primarily a verbal skill?
2. If critical thinking is dependent upon quantitative thinking, did the experimental programme provide the setting for the experimental group to score as well in the Critical Thinking Appraisal as their counterparts, who had scored considerably higher on the SCAT Quantitative Section?

CHAPTER V

RESULTS IN ACADEMIC PHASE

Innovations in education are historically slow in gaining acceptance. Before such an acceptance is granted, it must be demonstrated that the innovation will do the kinds of things that have been done conventionally in the past, and further that it will do these things at least as well as proven methods have. Thus it follows that before team teaching is acceptable, it must be demonstrated that students will achieve at least as well on conventional examinations as will students taught in a traditional way. To ascertain whether team-taught students do achieve as well on conventional examinations as their conventionally taught counterparts, two short-term projects were established.

I. THE ENGLISH 10 PROJECT

Two classes of English 10 students were matched with two other classes of English 10 students within the same school. The classes were matched on the basis of results received on the following tests:

- i) California Test of Mental Maturity administered in grade eight;
- ii) SCAT Verbal Raw Score obtained on the grade nine Departmental Examinations;
- iii) SCAT Quantitative Raw Score obtained on the grade nine Departmental Examinations;

iv) Raw Score obtained on the grade nine Language Departmental Examination.

Table III summarizes the resulting statistics.

A team of two English teachers together with the head of the English department was to be responsible for planning, presenting, and evaluating the learning experiences of the two experimental classes, while a third regular teacher of English, who could seek advice from the department head, was to be responsible for the two control classes.

The unit of work selected dealt with the study of the short story, its theme or purpose, its structure and its characters. The time allotted to this project was five weeks.

A test was administered at the beginning of the project and a test of similar construction culminated the study. Each test was constructed in the following way:

A. Objectively scored section	60%
Multiple choice items	(20 x 1%)
Completion items	(20 x 1%)
True and false items	(20 x 1%)
B. Subjectively scored section	40%
An analysis of a short story	
	<hr/>
	100%

Each of the four teachers individually contributed twenty multiple choice items, ten of which dealt with the short story in general, and ten with specific stories to be studied. Each of the four teachers submitted twenty completion questions, ten being of a general nature,

TABLE III
COMPARISON OF EXPERIMENTAL AND CONTROL GROUPS
ENGLISH 10

Variable	Grade in which obtained	Mean		Standard Deviation		df	t	p
		Exp. (N=45)	Control (N=54)	Exp.	Control			
CTMM	VIII	112.40	113.50	11.03	10.79	87	0.470	0.639
SCAT (Verbal)	IX	47.93	49.36	6.62	5.75	87	1.075	0.286
SCAT (Quantitative)	IX	39.13	37.89	6.08	8.02	87	0.818	0.415
Language (Raw Score)	IX	69.67	65.25	13.75	13.96	87	1.442	0.153

and ten dealing with the specific short stories. They did the same with the true-false items. Thus a bank of eighty multiple choice items, eighty completion and eighty true-false items was built. For the subjective part of the test, the four teachers submitted four analytic questions each, and a bank of these questions was on hand. Both the pre-test and the post-test were constructed by randomly selecting the required number of questions from the test bank. The teachers involved were not permitted to see either the pre-test or the post-test until after the completion of the project.

The pre-test was administered. The control group was taught for five weeks in a conventional way. The experimental group had many and varied experiences, some of which included: large group lectures, seminar discussions, individual learning, debates, individual consultations with the other students and teachers, regrouping of students, and regrouping of teachers. At the conclusion of the five-week programme the culminating test was administered. Both pre-tests and post-tests were corrected and tabulated. The results were compared, seeking t-values and seeking significant differences at the .05 level. Table IV summarizes the findings.

Summary of Results

There were originally one hundred and ten students involved. However, several had recently come to Alberta and were therefore excluded. Several missed the pre-test and several missed the post-test. Thus, the final tally showed forty-five students in the experimental group and forty-four students in the control group. The groups were

TABLE IV
COMPARISON OF ACHIEVEMENT
ENGLISH 10

Variable	Grade in which obtained	Mean		Standard Deviation		df	t	p
		Exp. (N=45)	Control (N=44)	Exp.	Control			
English 10 (Pre-Test)	X	34.67	32.59	7.56	8.74	87	1.185	0.240
English 10 (Post-Test)	X	50.02	46.34	8.46	8.24	87	2.056	0.043

matched adequately on the pre-determined criteria, as evidenced in Table III. This seems to be further borne out by the finding of no significant difference at the .05 level on the pre-test. These groups had achieved approximately equally well on Intelligence tests over a period of two years, and on Language Achievement during an overlapping two years.

The hypothesis that academic growth of students in English taught in a team teaching situation will be significantly higher than that of students taught in a traditional way was, however, accepted on the post-test, since there is a difference significant at the .05 level.

II. THE SCIENCE 10 PROJECT

The same experimental and control groups constituted in the English 10 phase of the project were used in the Science 10 phase. The classes were matched on the basis of results achieved on the following tests:

- i) California Test of Mental Maturity administered in grade eight;
- ii) SCAT Verbal Raw Score obtained on the grade nine Departmental Examinations;
- iii) SCAT Quantitative Raw Score obtained on the grade nine Departmental Examinations;
- iv) Raw Score obtained on the grade nine Science Departmental Examination.

Table V summarizes the findings of the matching procedures.

TABLE V
COMPARISON OF EXPERIMENTAL AND CONTROL GROUPS
SCIENCE 10

Variable	Grade in which obtained	Mean		Standard Deviation		df	t	p
		Exp. (N=45)	Control (N=44)	Exp.	Control			
CTMM	VIII	112.40	113.50	11.03	10.79	87	0.470	0.639
SCAT (Verbal)	IX	47.93	49.36	6.62	5.75	87	1.075	0.286
SCAT (Quantitative)	IX	39.13	37.89	6.08	8.02	87	0.818	0.415
Science (Raw Score)	IX	67.62	66.20	10.90	13.68	87	0.535	0.594

A team of two teachers planned, presented, and evaluated the learning experiences of the experimental group, while a third regular Science teacher was responsible for the control group. The work under discussion consisted of Chapters 3, 4, and 5 of the new grade ten Chem-Study course. Evaluation was by means of the standard chapter tests supplied by the authors of the Chem-Study course.

The team structured the programme along three distinct phases:

- Phase 1 (Chapter 3) - This embraced a teacher aspect only. The team members planned together how best to present the content material as outlined in the text.
- Phase 2 (Chapter 4) - Here there was co-operative planning with aim and content revision according to student performance (teacher and student aspect).
- Phase 3 (Chapter 5) - Co-operative planning was extended through aim and content revision to include large groups, seminars, laboratories, and opportunities for individualized learning. The use of technical equipment, such as overhead projectors, was implemented in this phase.

At the conclusion of each phase the standard tests were administered to both the experimental and control groups. The results were compared, the t-test was applied, and significant differences were sought at the .05 level. Table VI summarizes the findings.

Summary of Results

There were originally one hundred and ten students involved in the project. However, several had recently moved to Alberta, and

TABLE VI
COMPARISON OF ACHIEVEMENT
SCIENCE 10

Variable	Grade in which obtained	Mean		Standard Deviation		df	t	p
		Exp. (N=45)	Control (N=44)	Exp.	Control			
Science (Test 1)	X	56.04	58.48	13.64	12.70	87	0.861	0.392
Science (Test 2)	X	59.02	50.02	17.10	17.85	87	2.432	0.017
Science (Test 3)	X	66.02	37.80	13.79	16.71	87	8.604	0.000

others had missed one or more of the chapter tests. As a result there were forty-five students in the experimental group and forty-four students in the control group. That the groups were adequately matched on the predetermined criteria is accepted in all four cases as shown in Table V, since there were no significant differences at the .05 level.

The achievement test results, as summarized in Table VI, show a cumulative effect. At the conclusion of the first phase which focussed on teacher planning only, the results show no significant difference. The results of the second phase, which not only focussed on teacher planning but also on aim and content revision, show a significant difference. When varied student groupings and experiences were added during the third phase, the difference was highly significant. The hypothesis that academic growth of students in Science taught in a team teaching situation will be significantly different from that of students taught in a conventional way is therefore accepted.

CHAPTER VI

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Out of the apparent need of a specific group of students grew a team teaching project. In its beginning, five teachers formed a Humanities team and a team in the Sciences, and attempted to satisfy the educational requirements of the three classes of grade nine students. Three years later, these five teachers formed the core of a larger group of teachers responsible for the education of a larger group of students ranging from grade seven through grade ten.

The basic philosophy of approach had not changed radically since its inception. The teams were involved in co-operatively planning, presenting and evaluating the educational experiences of the students entrusted to their care. The basic emphasis did shift somewhat, in that the original emphasis appeared to focus on the presentation aspect, and in the latter stages, the emphasis shifted to the individualization of material for students.

After three years of operation, the staff felt a need for an evaluation of their work. There are many aspects of team teaching which might be evaluated. In the realm of that which is traditionally non-academic, one might evaluate the individualization of instruction as it affects both teachers and students. Another aspect might be the shift or responsibilities of both student and teacher, the student in the acceptance or rejection of his responsibility for his own education, the teacher in assuming the responsibility for the education of the

whole child. A further area of investigation might be reflected in the field of activities of both students and teachers, attitudes toward themselves, their peers, their superiors and towards society in general. Proponents of team teaching theorize that team teaching will prove to be a superior method of organization if these types of goals are to be realized. They further maintain that team teaching is a superior way of teaching if academic excellence is the goal of an educational enterprise.

The teams scanned this immense area, and selected two specific goals to evaluate. In the non-academic aspect, critical thinking seemed to be one skill of prime importance. Secondly they decided to test the academic excellent of their students by setting up controlled studies on units in English 10 and Science 10. In the critical thinking phase an outside control group was enlisted, and the Watson-Glaser Critical Thinking Appraisal was administered. In the academic phase, within school control groups were established, and common examinations were given. In all cases, the results were compared, t-tests were applied and significant differences were sought at the .05 level.

I. SUMMARY OF FINDINGS

Three hypotheses are the basis for this study. Each needs to be accepted or rejected on the evidence of the statistical findings.

Hypothesis I. Students in a team teaching school will have developed their critical thinking processes to a greater degree than students in a conventional school.

Statistical finding. This hypothesis is rejected.

Comments. In Table I, Comparison of Experimental and Control Groups, page 30, the groups were compared on two bases. If critical thinking is related only to the verbal aspect of intelligence and achievement, one of several conclusions might be inferred. First, critical thinking will develop to a similar degree regardless of the general teaching techniques and methods of organization. Or second, critical thinking is not an attitude, but a skill. If it is a skill, then a concerted effort must be made to teach it as any other skill must be taught. Table I also shows that the control group was superior to the experimental group in the quantitative aspect of the SCAT. This raises other questions, since no significant differences were noted on any of the sub - tests on the final scores on the Watson-Glaser Critical Thinking Appraisal. If critical thinking is a function of quantitative thinking, did the experimental programme actually attain the goal of superior critical thinking? Is critical thinking really a function of measured intelligence? The literature tends to be inconclusive in this regard. Taba found intelligence unrelated to level of thought.³⁹ On the other hand, Kastrinos found low but positive correlation between I.Q. and critical thinking ability.⁴⁰ It would appear much work and investigation must follow if critical thinking is to remain as an important goal of modern education.

³⁹Hilda Taba, "Thinking in Elementary School Children," *U.S. Office of Education Cooperation Research Project 1574* (San Francisco: San Francisco State College, 1964).

⁴⁰W. Kastrinos, "The Relationship of Two Methods of Teaching to the Development of Critical Thinking by High School Students in Advanced Biology," *Science Education*, Vol. 48, March, 1965, pp. 187 - 195.

Hypothesis II. Academic growth of students in English in a team teaching situation will be significantly superior to that of students taught in a traditional way.

Statistical finding. This hypothesis is accepted.

Comments. The post-test statistics reveal that there was some significant improvement in the performance of the experimental group as compared to the control group. This might be attributable in part to any number of different variables that were at work in the experimental group.

There was a freshness in approach used by the team teachers, an enthusiasm for a programme that had been well planned in advance of the actual teaching. The aims of each lesson had been scrutinized, the best method had been debated, the grouping procedures of students and teachers had been agreed upon. The confidence shown by the teachers may have had sufficient impact upon the students to make them also confident in what they were doing. Closed circuit television was used for two key lessons in the experimental programme and this may have had advantageous effects. The teacher variable was also difficult to control. In this case the control teacher had English qualifications equal to the average of that of team members, but lacked the length of teaching experience. On the other hand, lack of experience may have been an advantage to the control group, since recent methods and developments in English were familiar to the control teacher.

The results are therefore clouded with some uncertainties. Further, the findings are conclusive only of one short-term project,

in one subject area, and on one specific topic. No complete commitment can be made to team teaching on the basis of these findings only.

However, the findings are encouraging. This experimental group of students did perform in a significantly superior way. Whether the superior achievement can be attributed to team planning, team presentation, student participation, close circuit television, or to any of the other variables mentioned is not an important consideration. What is important is that team teaching provides the framework within which these variables may function at the discretion of the professional teacher.

Hypothesis III. Academic growth of students in Science taught in a team teaching situation will be significantly superior to that of students taught in a conventional way.

Statistical finding. This hypothesis is accepted.

Comments. It has been suggested that team teaching allows for the operation of many components, that each component in itself has little effect on the total product, and it is only through the interaction of several of these components that any significant difference will be evidenced. The science project was planned in such a way that it would be possible to test this assumption. The classes were matched satisfactorily on the predetermined criteria. At the conclusion of the first phase, that of co-operative teacher planning, no significant difference was observable. However, as each component was added in successive stages, the differences became more and more pronounced. These are results on a short-term project. Further research could attempt to show whether this concerted effort could be maintained both

on the part of the student and teacher. Further evidence could be produced as to whether some components are of greater value than others.

II. IMPLICATIONS

The results of this project appear to allow one to make two statements: i) In non-academic areas, such as in the area of critical thinking, team teaching does at least as good a job as conventional teaching does. ii) In academic areas, as in English and Science, students working in a team teaching environment achieve better than do their counterparts in a conventional setting. For these two reasons, team teaching as a type of organization appears to have much to offer to the modern school.

However, there were other observable features of the project which must be enumerated and discussed. Growth of professionalism in the staff was most marked. Teachers frequently consulted professional literature, administrative personnel, and university personnel. Their methodology became diversified. Programmed material, programmed tapes, non-graded reading programmes, teaching machines, independent learning, and instructional television all became tools to be used when a specific problem needed to be solved in a specific way. Much use was made of audio-visual equipment. Curricula were analyzed and reconstructed to suit the individual students in individual classes. Through joint planning sessions, opinions of the several teachers were brought to bear on specific problems. This professionalism became apparent through requests for staff members to speak at conferences and conventions, and by the appearance of their

writings in various publications. As a result of these and other factors, staff morale was high.

Student counselling improved. Not only did teachers plan and present collectively, they evaluated collectively. The problems of a particular student were often analyzed collectively, and a remedy proposed which was consistent with all staff members.

This type of organization has much to offer to a school. It is an organization which can allow for all innovation to function since one of its essential features is flexibility--flexibility of schedule, of plant, of programme, and of personnel. It fosters the type of climate which is conducive to student and teacher growth.

III. RECOMMENDATION

Team teaching has a young history in the United States and a younger history in Canada. Of the many attempts at team teaching in the United States, some have been most successful and others have been terminated. In Canada more and more schools are implementing some aspects of the plan. Probably the total programme should be initiated in some schools in order to ascertain what aspects of team teaching are most adaptable to our way of life. To do this here, schools need to be established which are totally committed to team teaching. The administration and staff would have to be selected because of their commitment and their desire to attempt such an undertaking. Inservice education before the opening of the school term would be critical. Time would need to be provided to establish the broad aims of the programme and to plan on a team basis for the specific population which

is to grow in this environment. Resource personnel from administrative offices, universities, and the Department of Education would be essential during this inservice programme.

Assistance in the form of teacher-aides and para-professionals would be necessary, so that the teachers could do those things for which they have been prepared. The staff would need to have access to a physical plant flexible enough to permit various sized groupings of students and teachers. The material needs, such as research materials, should be available.

With such a school, and with the co-operation of University and Department of Education personnel, many of the innovations being discussed could be implemented. Those which proved beneficial to our youth could be practiced without fear in other schools. Innovations found inadequate could be modified or discarded if necessary.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Anderson, Robert H. "Some Types of Cooperative Teaching in Current Use." *National Elementary Principal*. Vol. 44, January, 1965,
- Angrave, James. "Team Teaching and Non-Grading: A Case for Individual Timetabling in Canadian Schools." *Canadian Education and Research Digest*. Vol. 5, March, 1965,
- Arnold, W. E. "Is Team Teaching the Answer?" *School and Society*. Vol. 91, December, 1963,
- Bahner, John M. "Team Teaching in the Elementary School." *Education*. Vol. 85, No. 6, February, 1965,
- Blount, Nathan S. "Fructify The Folding Doors: Team Teaching Re-examined." *The English Journal*. Vol. 53, March, 1962, 179.
- Brownell, John A. and Harris A. Taylor. "Theoretical Perspectives for Teaching Teams." *Phi Delta Kappan*. Vol. 43, January, 1962,
- Carlin, Philip M. "A Current Appraisal of Team Teaching." *Education*. Vol. 85, No. 6, February, 1965,
- Corrigan, Dean and Robert Hynes. "What Have We Learned From Team Teaching?" *Social Education*. April, 1965,
- Chausow, H. M. "Evaluation of Critical Thinking in the Social Studies." *National Council of Social Studies Yearbook* 35. 1965,
- Diers, Harmon. "Team Teaching of Music History." *Music Educators' Journal*. Vol. 53, April-May, 1965,
- Diesman, Florence M. "Team Teaching Has Many Forms." *English Journal*. Vol. 53, No. 3, March, 1964,
- Dressel, Paul and Lewis B. Mayhew (Directors, General Education). *Explorations in Evaluation, Final Report of the Co-operative Study of Evaluation in General Education*. Washington, D.C.: American Council on Education, 1954.
- Hayes, Charles H. "Team Teaching in Culturally Deprived Areas." *National Elementary Principal*. Vol. 44, January, 1965, 65.
- Heathers, Glen. "Research on Implementing and Evaluating Cooperative Teaching." *National Elementary Principal*. Vol. 44, January, 1965

- Howe II, Harold. "The Curriculum, The Team, and The School: An Examination of Relationships." *Journal of Secondary Education*. Vol. 37, No. 6, October, 1962, 353 - 361.
- Hunt, Douglas. "The Premise of Change." *N.A.S.S.P. Bulletin*. Vol. 47, No. 283, May, 1963, 11., 2.
- Jensen, Laurell, *et al.* "Eighth Grade Team Teaching at the Roosevelt Junior High School." *California Journal of Secondary Education*. Vol. 35, April, 1960, 263 - 273.
- Johnson, Overton R. "Team Teaching." *American Vocational Journal*. March, 1966, 24 - 25.
- Kastrinos, W. "The Relationship of Two Methods of Teaching to the Development of Critical Thinking by High School Students in Advanced Biology." *Science Education*. Vol. 48, March, 1964, 187 - 195.
- Martin, Charles K. and Daniel Munger I. "Team Teaching in a Course in Fundamentals of Speech." *The Speech Teacher*. Vol. 4, November, 1965, 331 - 333.
- Mason, H., *et al.* "A Report on Team Teaching Adapted to a Standard Secondary School Curriculum" *American Biology Teacher*. Vol. 26, 363 - 365.
- Mitchell, Donald O. "Housing Cooperative Teaching Program." *National Elementary Principal*. Vol. 44, No. 3, January, 1965, 44 - 52.
- Montag, Betty J., *et al.* "TV vs Overcrowding in General Science." *The Science Teacher*. Vol. 31, April, 1964, 51 - 55.
- Nelson, J. W. and G. A. Robinson. "Teacher Education Through Team Teaching." *School and Society*. Vol. 91, December, 1963, 409 - 410.
- Shaplin, Judson T. "Cooperative Teaching: Definitions and Organizational Analysis." *National Elementary Principal*. Vol. 44, January, 1965, 14 - 20.
- Smith, William M. "Team Teaching The Superior Student in Biology." *American Biology Teacher*. March, 1966, 187 - 190.
- Taba, Hilda. "Thinking in Elementary School Children." *U.S. Office of Education Cooperation Research Project 1574*. San Francisco: San Francisco State College, 1964.

- Taylor, H. and K. Olsen. "Team Teaching with Trainable Mentally Retarded Children. *Exceptional Children*. Vol. 30, March, 1964 304 - 309.
- Trump, J. Lloyd. "Problems Faced in Organizing a School Differently." *American School Board Journal*. Vol. 146-147, November, 1963, 7-8, 70.
- Trump, J. Lloyd. "What is Team Teaching?" *Education*. Vol. 85, No. 6, February, 1965, 327 - 332.
- White, Robert W. "How Successful is Team Teaching?" *Science Teacher*. Vol. 31, October, 1964, 256 - 257.
- Wilderling, Margaret F. "The Only Way to Teach." *The Arithmetic Teacher*. Vol. 12, April, 1965, 256 - 257.
- _____. "A Critical Look at Team Teaching." Editorial in *The Instructor*. Vol. 71, October, 1961, 39 - 42.

APPENDIX A

E N G L I S H 10

SHORT STORY

This test deals with the short story as a form of writing. Some of the questions may be too difficult to answer. Some questions may be on material which is unfamiliar to you. Do not let this discourage you. Do as many as you can, and do them as well as you can. When the Short Story has been taught, you will be tested again. Then you can show us how much you have learned.

NAME

HOME ROOM

TEACHER

English 10 - Short Story - Page #1

I. Pick out the best answer and place the corresponding letter in the space provided.

1. The limitation of one of the characters in a short story is largely due to:

- (a) its plot
 - (b) its action
 - (c) its length
 - (d) its message
-

2. The surprise ending technique may show:

- (a) careful and logical planning
 - (b) dramatic effectiveness
 - (c) lack of skillful writing
 - (d) lack of significance
-

3. The denouement is the:

- (a) climax
 - (b) series of complications
 - (c) conflict
 - (d) final revelation
-

4. Motivation is an important element in the short story because:

- (a) it makes the characters understandable
 - (b) it makes the setting more realistic
 - (c) it makes the characters suit the setting
 - (d) it makes the climax easier to find
-

5. Daru lived:

- (a) on the upper plateau
 - (b) on the plateau itself to the North
 - (c) to the east of Tinguit
 - (d) foothills
-

6. If the short story writer's aim is to create an appropriate mood for the events which follow, which of the following methods of beginning the story is LEAST effective?

- (a) by explanation
 - (b) by dialogue
 - (c) by description of the setting
 - (d) by plunging into the story itself
-

English 10 - Short Story - Page #2

7. The main character in "The Lagoon" is:
- (a) Tuan
 - (b) Inchi Midah
 - (c) Diameten
 - (d) Arsat
-
8. Daru put the revolver:
- (a) under the bed
 - (b) in the dresser drawer
 - (c) in his jacket pocket
 - (d) in his desk drawer
-
9. Arsat was a:
- (a) black man
 - (b) an oriental
 - (c) a white man
 - (d) an Indian
-
10. Maxine Dufour's motivation for helping Dorette was:
- (a) a sense of responsibility
 - (b) love
 - (c) pity
 - (d) remorse
-
11. Indicate which one of the following is NOT a necessary characteristic of short story titles:
- (a) they should be original
 - (b) they should indicate the outcome
 - (c) they should be significant
 - (d) they should be brief
-
12. The most effective way of portraying character is:
- (a) flashback
 - (b) summary
 - (c) conversation
 - (d) motivation
-
13. A reader should evaluate an ending on:
- (a) whether it is happy or unhappy
 - (b) whether the plot is completely resolved
 - (c) whether it is logical in terms of what precedes it
 - (d) the basis of character control
-

English 10 - Short Story - Page #3

14. The short story which emphasizes the idea behind the story is classified as a:
- (a) story of character
 - (b) story of setting
 - (c) story of plot
 - (d) story of theme
15. Garth went for the doctor after his brother had been:
- (a) seriously wounded
 - (b) injured by a falling tree
 - (c) stricken with pneumonia
 - (d) brought home with a broken leg
16. Which of the following sources of information about character in a short story is LEAST effective?
- (a) what the character says
 - (b) what the author says about the character
 - (c) what the character does
 - (d) what other characters say about him
17. Daru loved his poor location because:
- (a) he was born there
 - (b) he disliked company
 - (c) he was able to meditate
 - (d) he was hunted by the French Government
18. The method used by the Author to begin "The Stove" was:
- (a) explanation
 - (b) dialogue
 - (c) description of the setting
 - (d) plunging into the story itself
19. The author tells the story:
- (a) as an active participant
 - (b) repeats a story told to her by a participant
 - (c) is aware of what goes on in the minds of the characters
 - (d) by extensive use of dialogue
20. A fantasy differs from the general type of short story in that:
- (a) the ending is illogical
 - (b) the characters are all heroic
 - (c) there is an element of make-believe
 - (d) there is an element of comedy

II. Decide what word, or group of words, best complete the thought expressed in each of the following:

1. The short story which presents a fundamental idea or truth is called the story of _____.
2. An object which stands for something larger or more important than itself is called a _____.
3. The character or force in conflict with the Protagonist of a story, novel, or drama is called _____.
4. Balducci left a _____ with Daru for protection.
5. From the reader's point of view the highest point of interest or of emotional intensity is called _____.
6. The final revelation which clarifies the outcome of a short story is called the _____.
7. The central conflict in "The Guest" is _____.
8. The setting of a short story often sets the _____ of the work.
9. _____ is a position in which he must choose between two courses of action, both are undesirable.
10. Genuine emotion in a short story like character must be presented _____ and must be dramatized.
11. _____, a literary technique, enables the writer to suggest meanings without stating them.
12. The use of the metaphor and of unique expression is called the _____ of the author.
13. An author sometimes uses an object to indicate a deeper significance; this device is called _____.
14. An author reveals the purposes and impulses that determine the behavior of his characters. This is called _____.
15. When the author knows everything about his characters the mental point of view is _____.
16. The children in "The Frill" finally ran out into the court to play; they had got used even to their father's _____.

English 10 - Short Story - Page #5

17. The device Chekhov uses to show the innermost emotions of the prisoner in "The Bet" is _____.
18. In "The Bet", the 'you' whom the prisoner addresses in his writing, refers to _____.
19. The author's attitude towards his subject, shown by his emphasis and comment, diction and style, is called the _____.
20. When man struggles against man the struggle is termed _____.

III. True or False. Decide whether each of the following statements are true or false. Write the word True, or the word False in the space provided.

1. A symbol in a story has only one meaning. _____
2. Dorette was younger than her brother Derek. _____
3. Escape literature is written to broaden and deepen our awareness of life. _____
4. Foreshadowing occurs when the reader is told about events which happened before the story began. _____
5. Mrs. Lowe changes her mind only once in the course of the story "The Frill". _____
6. A story in the first person often reflects its tone directly in the language used by the narrator. _____
7. All stories have theme. _____
8. The words grudgingly, imploringly, furtively, all describe the actions of one character in "The Frill". _____
9. Coincidence in a short story is the chance concurrence of two events which have a peculiar correspondence. _____
10. Money plays an important part in "The Frill". _____
11. Situations and problems similar to those in "The Frill" are to be found in Canada to-day. _____

English 10 - Short Story - Page #6

12. In the second half of the sixth year, the prisoner began zealously to study languages, philosophy and history in "The Bet". _____
13. To be most effective, the climax of the short story should be near the centre. _____
14. "The Bet" is a strong argument against capital punishment. _____
15. The short story as a form of literature is relatively new. _____
16. The periodical has helped to lower story standards. _____
17. A short story should show a struggle between two opposing forces. _____
18. Conrad develops his characters through their rich and appropriate dialogue. _____
19. The ambiguous ending was developed by Maupassant. _____
20. Chekhov made trivial happenings seem very significant. _____

IV. READ THE ATTACHED SHORT STORY AND THEN ANSWER THESE QUESTIONS.

Analyse this short story by discussing the following:

1. Title: suitability
effect

Characters: (a) dominant (protagonist)
(subordinate)

2. Explain the meaning of irony; select from the short stories studied recently, two examples.
3. Does the theme reinforce or oppose popular notions of life? Does it furnish a new insight or refresh or deepen an old one?
4. Does the story aim directly at an emotional effect or is its emotion merely its natural by-product?

Necktie Party

by Henry Gregor Felsen

Down here in Texas we've got a book that is supposed to show every world's record held by Texas, only it don't. There is one Texas record that ain't in the book and is unknown about even to Texas. As the last living survivor of the posse that helped set that record, I feel it's my duty to claim it for Texas--even if Texas won't want it.

The record I claim is for the longest informal hanging of a cattle rustler. It was set on a August night in 1886 near Spanish Fort, Texas, when we strung up the notorious rustler Shawnee Sam.

The funny part of it is, we didn't know until later it was him. At the time we thought he was just a rustler who needed hanging. He had a fast horse and a head start, and we never would have caught him except that his horse fell and throwed him.

There didn't seem to be anything special about the feller at the time. He dusted himself off and looked around at us and nodded, and said he sure was glad to see us, and it certainly was funny what had happened to him. What had happened, he said, was that he had been riding at night to escape the heat of the day, and he'd fallen asleep in the saddle until our shooting had woke him up.

To his great surprise, he said, he discovered that his horse had fallen in behind a herd of stray cattle, and was following them at a dead run toward the Oklahoma border. Then his horse stepped in a gopher hole and throwed him, and the fall had somehow pushed his bandanna up over his face.

When the stranger had said his piece, the sheriff said, "All right, boys. The trial is over."

A couple of us rode to a nearby cottonwood tree and throwed a rope over a limb. We got the stranger mounted, tied his hands behind his back, and positioned him under the limb where the noose was. The sheriff slipped the noose over the feller's head. Then he said to me, "Hank, you stand by. When I lift my hat, you lay a quirt to his horse."

"Sheriff," the stranger said in a mild voice, "I think you're forgetting some of my rights and privileges in this hanging. I'd hate for it to get around how slipshod the hangings are in East Texas."

"If you're so stuck on getting hung West Texas style," the sheriff said, "why didn't you stay home and rustle West Texas cattle?"

"To tell you the truth, Sheriff," the stranger said, "there ain't better stealing beef in the whole world than in East Texas. But we ain't arguing hangings, and when we have a hanging in West Texas, we extend the condemned man the common courtesies of the occasion."

Well, the sheriff just sat there for a minute scratching his chin and thinking. A quick hanging would have been like admitting that East Texas was satisfied with hangings that didn't come up to West standards. On the other hand, it wouldn't look good if it got out that a West Texas outlaw had to instruct an East Texas sheriff on how to hang.

"Stranger," the sheriff said, "you made a kind of remark about our East Texas cattle. I guess we can return the kindness. We'll be happy to hang you West Texas style." He thought a moment. "Who might we be having the pleasure to hang here?" he said grandly.

"The name is Tex," the stranger said. "Tex Tyler."

"Tex Tyler," the sheriff said in a loud official voice, "do you have any last words to say before you swing?"

The outlaw bowed his head. "I would like at this time," he said in a soft voice, "to say a few words about Texas." He cleared his throat, and all of us in the posse uncovered.

"Friends and captors," the outlaw said, lifting his face to the sky, "let us consider together how Texas was born. Two billion years ago a wandering star passed too near the sun and tore off a giant chunk of flaming gas. Once it was off by itself in the sky, the gas cooled and got solid, and that bright fragment of the sun became Texas . . ."

The stranger spoke on, and we sat on our horses and listened. It got late and cold, but the man was talking about Texas, and we listened.

He told how Texas got all covered with water a thousand feet deep, and how there was fish swimming over Texas that was a hundred times bigger than the biggest whale. And he told how the water drained off Texas to make the oceans that we have now. He went on to tell how grass began to grow in Texas, and animals to appear--critters with tails as long as trees. If he hadn't been talking about Texas, we wouldn't have believed a word he said.

He talked about them things all night, and the sun was coming up before he took a deep breath and was quiet for a moment. The sheriff came awake with a start, but before he could order the hanging, the stranger said: "So much for the birth of Texas. I would now like to say a few words about Texas history." And he started in with the story of mankind in Texas, beginning about fifteen minutes this side of the ape.

Along about seven o'clock in the morning the horses were getting restless, and it was pretty hard for us to think of Texas instead of coffee.

"Tex," the sheriff said, "the boys and myself appreciate your feelings about Texas, but we've got business elsewhere. I know you don't want your hanging to stand in the way of Texas progress."

"Sheriff," Tex answered, "if this was an ordinary hanging, I'd be glad to oblige your request to speed things up. But this is a momentous occasion. How long have I been talking?"

"Nearly six hours, Tex," the sheriff told him.

The prisoner sighed. "Well, Sheriff, I'll never make it. I'm already getting hoarse."

"You'll never make what?" the sheriff asked.

"That was my little secret," Tex said. "I happen to know that the world's record for long hangings is held by Arizona. It was set about eight years ago. The feller talked for nine hours." Tex shook his head in a sad, tired way. "I ain't going to make it. I don't mind so much for myself, but I hate to see Texas in second place. Just tell all the world I done my best, I'm ready, Sheriff."

He was, but we wasn't. The sheriff called us aside. "It ain't right we're after any glory for ourselves," he said, "but we've got to think about Texas. I think our duty is clear."

Naturally we agreed with the sheriff, and we went back to the prisoner. "Tex," the sheriff said, "me and the boys have decided to help you try for that record. It's only three more hours. You've gotta try!"

And the stranger did. He talked for another hour, but we could tell his voice was getting weaker and weaker. Another half hour and he was barely able to whisper. And in two hours, an hour shy of the record, his voice was quite gone.

"There must be some kind of a noise he can make," Ted Brock said, and then he whispered something into the prisoner's ear. The prisoner straightened up with a look of new confidence, and two seconds later he was whistling "Yellow Rose of Texas". We couldn't help but cheer.

He whistled for twenty minutes, and we began to hope. But at thirty minutes his whistle sounded thin, and at forty minutes we had to stand real close to hear.

At fifty minutes two of us were holding him up in the saddle. At fifty-nine minutes he fell back against me, but I put my ear to his lips and I could still hear that Texas song.

Then a gun went off. The sheriff stood before us with his watch in one hand and his pistol in the other. "Nine hours," he said. "We've tied the Arizona record!"

At those words the rustler pulled himself up straight. He took a big breath and found the strength to sing the Texas song and break the record!

Well, you never heard such whooping and hollering in your life. We took the rustler down from his horse and gave him water and shook his hand. It was Ted Brock who brung us back to reality.

"Now that we've got the record," Ted said, "we can finish the hanging and go home."

"Finish the hanging!" one of the boys shouted. "After what this feller done for Texas!"

"We got to," said Ted, "otherwise it won't be no record. You can't claim a record for the longest hanging unless you hang somebody, can you?"

That sobered us up in a hurry. It was a problem, all right, and it took the sheriff to solve it.

"Men," the sheriff said, "we have to hang this man. But no court of law has passed sentence that he be hung by the neck until dead. This is an informal hanging, and as sheriff, I order that this man be hung until we think he's dead."

So we dropped the noose down under the rustler's arms. Then we eased his horse forward until the rustler was hanging from the tree. "All right, boys," the sheriff called. "I think this man has been hung until we think he's dead."

We helped the rustler down and let him go, and Texas held the record.

We rode back to town at top speed and trooped into the saloon to celebrate--all except the sheriff, who had to ride over to the jail first and make his report.

There was the biggest noise and jollity you ever heard in that saloon, until the sheriff come back. He laid a paper on the bar. "Look at this," he said in a shaking voice. "It just came to me by mail."

I looked with the others and saw a WANTED poster with a picture of Tex Tyler, our recent prisoner, on it. But according to this poster it wasn't Tex Tyler at all. It was Shawnee Sam.

"Men," the sheriff said when we quieted down, "we can't report this record. We can't even mention it to anybody. What if the world's record for talking Texas at a hanging was set by a Oklahoma boy?"

The bitter part of it was that Shawnee Sam was probably the only man in the history of Texas who deserved hanging more after he was hung before.

APPENDIX B

E N G L I S H 10

SHORT STORY

NAME

HOME ROOM

TEACHER

ENGLISH 10 - Short Story - Page #1

I. Pick out the best answer and place the corresponding letter in the space provided.

1. The long hours of the night were spent by the main character in "The Frill" in:

- (a) meditating
 - (b) sewing
 - (c) weeping
 - (d) sleeping
-

2. The ambiguous ending was developed by:

- (a) Frank Stockton
 - (b) O. Henry
 - (c) Leonard Merrick
 - (d) Maupassant
-

3. The white man who arrived in the boat was:

- (a) old and weak
 - (b) old and powerful
 - (c) young and powerful
 - (d) young and weak
-

4. Not all short stories are suitable for dramatization. Which one of the following characteristics of a short story would make it unsuitable for dramatization?

- (a) being confined to a single setting
 - (b) consisting of little action and a great deal of description
 - (c) having a plot made up of well-defined scenes
 - (d) being told primarily by dialogue
-

5. The ability to state theme is usually a test of our

- (a) observations
 - (b) understanding
 - (c) experiences
 - (d) foresight
-

6. A story told by an impersonal narrator outside of the action who knows everything is said to be from the point of view of:

- (a) the first person
 - (b) the personal
 - (c) the omniscient
 - (d) the impersonal
-

ENGLISH 10 - Short Story - Page #2

7. A reader should evaluate an ending on:
- (a) whether it is happy or unhappy
 - (b) whether the plot is completely resolved
 - (c) whether it is logical in terms of what preceded it
 - (d) the basis of character control
8. Arsat was a
- (a) black man
 - (b) an oriental
 - (c) a white man
 - (d) an Indian
9. A character characterized by one or two traits is called:
- (a) flat character
 - (b) round character
 - (c) static character
 - (d) stagnant character
10. "The Bet" represents primarily:
- (a) a plot short story
 - (b) a character story
 - (c) a theme short story
 - (d) a fantasy short story
11. The tone of "The Bet" is:
- (a) unemotional
 - (b) scornful
 - (c) humorous
 - (d) wistful
 - (e) disgusted
12. In "The Stove" the author tells the story:
- (a) as an active participant
 - (b) repeats a story told to her by a participant
 - (c) is aware of what goes on in the minds of the characters
 - (d) by extensive use of dialogue
13. Indicate which one of the following is NOT a necessary characteristic of Short Story titles:
- (a) they should be original
 - (b) they should indicate the outcome
 - (c) they should be significant
 - (d) they should be brief

ENGLISH 10 - Short Story - Page #3

14. "The Stove" possesses:

- (a) unity of action
 - (b) unity of time
 - (c) unity of place
 - (d) all of these
-

15. The letter in "The Bet" presents:

- (a) the climax
 - (b) the denouement
 - (c) the conflict
 - (d) the suspense
-

16. In the first year the lawyer was sent:

- (a) books of light character
 - (b) the New Testament
 - (c) the treatise on philosophy
 - (d) Byron's "Don Juan"
-

17. If the short story writer's aim is to create an appropriate mood for the events which follow, which of the following methods of beginning the story is LEAST effective?

- (a) by explanation
 - (b) by dialogue
 - (c) by description
 - (d) by plunging into the story itself
-

18. The story within the short story "The Lagoon" presents the:

- (a) character
 - (b) conflict
 - (c) denouement
 - (d) climax
-

19. The author who is known for "his ability to see life in its interesting and dramatic moment" is:

- (a) Conrad
 - (b) O'Connor
 - (c) Chesterton
 - (d) Chekhov
-

20. The short story which emphasizes what is happening or is going to happen to the main character is a:

- (a) story of character
 - (b) story of setting
 - (c) story of plot
 - (d) story of theme
-

ENGLISH 10 - Short Story - Page #4

II. Decide what word, or group of words, best complete the thought expressed in each of the following.

1. The final revelation in a story is called the _____.
2. Daru read: "You handed over our _____. You will pay for this."
3. The condensing of a plot into one sentence is called an _____.
4. The device Chekhov uses to show the innermost emotions of the prisoner in "The Bet" is _____.
5. The use of the metaphor and of the unique expression is called the _____ of the author.
6. A character in a short story who lacks individuality is called a _____.
7. A lesson taught by a short story is called the _____.
8. The conflict within the individual is termed _____.
9. The character in a short story who lacks individuality is called a _____.
10. The children in "The Frill" finally ran out into the court to play; they had got used even to their father's _____.
11. A praus is a type of _____.
12. _____, a literary technique, enables the writer to suggest meanings without stating them.
13. In "The Frill", one character wrapped a grey towel around the head to prevent _____.
14. The book that the prisoner in "The Bet" spent the longest time studying was _____.
15. _____ is a clash of actions, ideas, desires or wills.
16. The author's attitude towards his subject, shown by his emphasis and comment, diction and style, is called the _____.
17. In _____ the contrast is between what a character says and what the reader knows to be true.

ENGLISH 10 - Short Story - Page #5

18. An element in a story which causes anxious uncertainty in the reader is called _____.
19. From the reader's point of view, the highest point of interest or of emotional intensity is called _____.
20. The effect of implying a meaning quite different from the apparent meaning is called _____.

III. True or False. Decide whether each of the following statements are true or false. Write the word True, or the word False in the space provided.

1. A good short story writer should have the ability to make his reader react to his characters. _____
2. In the second half of the sixth year, the prisoner began zealously to study languages, philosophy and history in "The Bet". _____
3. The author is considered omniscient if he knows all about his characters. _____
4. Arsat was not accepted by his own kind. _____
5. To be most effective, the climax of the short story should be near the centre. _____
6. In "The Frill", Mrs. Lowe was the wife of the British Consul-General. _____
7. The short story as a form of literature is relatively new. _____
8. The period of time covered is important to a short story writer. _____
9. A short story should show a struggle between two opposing forces. _____
10. "Isabella" is closer to a short story than "Joseph". _____
11. The approximate time setting of "The Frill" is the early 19th century. _____
12. The ambiguous ending was developed by Maupassant. _____
13. The focal interest in the story is the question of Derek's survival. _____

14. Coincidence in a short story is the chance concurrence of two events which have a peculiar correspondence. _____
15. The terms "moral" and "theme" are interchangeable. _____
16. Conrad's descriptions are important to develop mood. _____
17. Chekhov often stressed the importance of human life. _____
18. Dialogue helps a reader understand the character. _____
19. Chekhov made trivial happenings seem very significant. _____
20. Foreshadowing occurs when the reader is told about which happened before the story began. _____

IV. READ THE ATTACHED SHORT STORY AND THEN ANSWER THESE QUESTIONS.

Analyse the attached story by discussing the following:

1. Plot: basic conflict, basic situation, complicating incident, climax, resolution and conclusion.
2. Type of story.
3. Author's point of view.
4. What contribution to the story is made by its setting?
To the particular setting essential, or could the story have happened anywhere?

Select any stereotype (stock character) from a comic strip or T.V. programme, and a comparable character from a short story studied recently. Contrast the two so that the value of the real characterization is demonstrated.

"My aunt will be down presently, Mr. Nuttel," said a very self-possessed young lady of fifteen; "In the meantime you must try and put up with me."

Framton Nuttel endeavored to say the correct something which should duly flatter the niece of the moment without unduly discounting the aunt that was to come. Privately he doubted more than ever whether these formal visits on a succession of total strangers would do much towards helping the nerve cure which he was supposed to be undergoing.

"I know how it will be," his sister had said when he was preparing to migrate to this rural retreat; "you will bury yourself down there and not speak to a living soul, and your nerves will be worse than ever from moping. I shall just give you letters of introduction to all the people I know there. Some of them, as far as I can remember, were quite nice."

Framton wondered whether Mrs. Sappleton, the lady to whom he was presenting one of the letters of introduction, came into that nice division.

"Do you know many of the people round here?" asked the niece, when she judged that they had had sufficient silent communion.

"Hardly a soul," said Framton. "My sister was staying here, at the rectory, you know, some four years ago, and she gave me letters of introduction to some of the people here."

He made the last statement in a tone of distinct regret.

"Then you know practically nothing about my aunt?" pursued the self-possessed young lady.

"Only her name and address," admitted the caller. He was wondering whether Mrs. Sappleton was in the married or widowed state. An undefinable something about the room seemed to suggest masculine habitation.

"Her great tragedy happened just three years ago," said the child; "that would be since your sister's time."

"Her tragedy?" asked Framton; somehow in this restful country spot tragedies seemed out of place.

"You may wonder why we keep that window wide open on an October afternoon," said the niece, indicating a large French window that opened on to a lawn.

"It is quite warm for the time of the year," said Framton; "but has that window got anything to do with the tragedy?"

"Out through that window, three years ago to the day, her husband and her two young brothers went off for their day's shooting. They never came back. In crossing the moor to their favorite snipe-shooting ground they were all three engulfed in a treacherous piece of bog. It had been that dreadful wet summer, you know, and places that were safe in other years gave way suddenly without warning. Their bodies were never recovered. That was the dreadful part of it." Here the child's voice lost its self-possessed note and became falteringly human.

"Poor aunt always thinks that they will come back some day, they and the little brown spaniel that was lost with them, and walk in that

very window just as they used to do. That is why the window is kept open every evening till it is quite dusk. Poor dear aunt, she has often told me how they went out, her husband with his white waterproof coat over his arm, and Ronnie, her youngest brother, singing, 'Bertie, why do you bound?' as he always did to tease her, because she said it got on her nerves. Do you know, sometimes, on quiet evening like this, I almost get a creepy feeling that they will all walk in through that window--"

She broke off with a little shudder. It was a relief to Framton when the aunt bustled into the room with a whirl of apologies for being late in making her appearance.

"I hope Vera has been amusing you?" she said.

"She has been very interesting," said Framton.

"I hope you don't mind the open window," said Mrs. Sappleton briskly; "my husband and brothers will be home directly from shooting, and they always come in this way. They've been out for snipe on the marshes today, so they'll make a fine mess over my poor carpets. So like you men-folk, isn't it?"

She rattled on cheerfully about the shooting and the scarcity of the birds, and the prospect for duck in the winter. To Framton it was all pure horrible. He made a desperate but only partially successful effort to turn the talk on to a less ghastly topic; he was conscious that his hostess was giving him only a fragment of her attention, and her eyes were constantly straying past him to the open window and the lawn beyond. It was certainly an unfortunate coincidence that he should have paid his visit on this tragic anniversary.

"The doctors agree in ordering me complete rest, and absence of mental excitement, and avoidance of anything in the nature of violent physical exertion," announced Framton, who laboured under the tolerably widespread delusion that total strangers and chance acquaintances are hungry for the least detail of one's ailments and infirmities, their cause and cure. "On the matter of diet they are not so much in agreement," he continued.

"No?" said Mrs. Sappleton, in a voice which only replaced a yawn at the last moment. Then she suddenly brightened into alert attention--but not to what Framton was saying.

"Here they are at last!" she cried. "Just in time for tea, and don't they look as if they were muddy up to the eyes!"

Framton shivered slightly and turned towards the niece with a look intended to convey sympathetic comprehension. The child was staring out through the open window with a dazed horror in her eyes. In a chill shock the nameless fear Framton swung round in his seat and looked in the same direction.

In the deepening twilight three figures were walking across the lawn towards the window; they all carried guns under their arms, and one of them was additionally burdened with a white coat hung over his shoulders. A tired brown spaniel kept close at their heels. Noiselessly they neared the house, and then a hoarse young voice chanted out of the dusk: "I said, Bertie, why do you bound?"

Framton grabbed wildly at his stick and hat; the hall-door, the gravel-drive, and the front gate were dimly noted stages in his head-long retreat. A cyclist coming along the road had to run into the hedge to avoid imminent collision.

"Here we are, my dear," said the bearer of the white mackintosh, coming in through the window; "fairly muddy, but most of it's dry. Who was that who bolted out as we came up?"

"A most extraordinary man, a Mr. Nuttel," said Mrs. Sappleton; "could only talk about his illnesses, and dashed off without a word of good-bye or apology when you arrived. One would think he had seen a ghost."

"I expect it was the spaniel," said the niece calmly; "he told me he had a horror of dogs. He was once hunted into a cemetery somewhere on the banks of the Ganges by a pack of pariah dogs, and had to spend the night in a newly dug grave with the creatures snarling and grinning and foaming just above him. Enough to make any one lose their nerve."

Romance at short notice was her specialty.

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